

What is claimed is:

1. A fuel cell system comprising:  
a fuel cell having output terminals;  
5 a voltage converter that is connected to said output terminals of said fuel cell,  
an electrical storage device that is connected in parallel to said fuel cell via said  
voltage converter and is capable of power charging and discharge;  
a current detector that detects the current value of said fuel cell; and  
an offset correction value determination device that determines the offset correction  
10 value for said current detector by setting the output terminal voltage of said fuel cell to the  
open circuit voltage via said voltage converter.
2. A fuel cell system according to Claim 1, wherein said fuel cell system is mounted in  
a moving object, said offset correction value determination device determines said offset  
15 correction value by setting the output terminal voltage of said fuel cell to the open circuit  
voltage during a period that the moving object does not require power generation by said fuel  
cell.
3. A fuel cell system according to Claim 2, wherein said period that power generation  
20 by said fuel cell is not required may be at least one of the period before the fuel cell system  
has started, during regenerative operation of the moving object, during intermittent operation  
of the fuel cell system and after operation of the fuel cell has stopped.
4. A fuel cell system according to Claim 1, wherein said fuel cell system is mounted in  
25 a moving object, and said offset correction value determination device determines said offset  
correction value by setting the output terminal voltage of said fuel cell to the open circuit  
voltage when the temperature of said current detector equals or exceeds a prescribed  
temperature, when the rate of temperature increase of said current detector equals or exceeds a

prescribed rate, or after a prescribed period of time has elapsed since correction of said current detector.

5           5. A fuel cell system according to Claim 4, wherein when the amount of power demanded by said moving object exceeds the amount of power that can be supplied by said electrical storage device, said offset correction value determination device does not set the output terminal voltage of said fuel cell to the open circuit voltage and does not determine the offset correction value.

10           6. A fuel cell system comprising:  
a fuel cell having output terminals;  
a current detector that detects the current value of said fuel cell; and  
an offset correction value determination device that determines the offset correction value for said current detector by setting the output terminal voltage of said fuel cell to the  
15   open circuit voltage.

          7. A method of determining offset correction value for the current detector in a fuel cell system including an electrical storage device that is connected in parallel to a fuel cell via a voltage converter, wherein the voltage converter is connected to the output terminals of such  
20   fuel cell, the method comprising:  
          setting the output terminal voltage of said fuel cell to the open circuit voltage via said voltage converter; and  
          determining the offset correction value for said current detector.